DOCUMENT RESUME

ED 251 188 PS 014 721

AUTHOR Yagi, Kan
TITLE Chapter I Early Childhood Education Program: Year End Evaluation Report, July 1984.
INSTITUTION Portland Public Schools, OR. Evaluation Dept.
PUB DATE 15 Aug 84
NOTE 40p.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Achievement; Arithmetic; *Disadvantaged Youth; Early Childhood Education; Followup Studies; Grade 3; Interpersonal Competence; Kindergarten; Language Skills; *Preschool Children; Program Descriptions; *Program Effectiveness; *Program Evaluation
IDENTIFIERS Oregon (Portland)

ABSTRACT

This year-end evaluation report concludes the twelfth year of operation of the Chapter I Early Childhood Education (Preschool) Program in Portland, Oregon, public schools. The purpose of the preschool program is to provide educationally disadvantaged children with the experiences needed to ameliorate their disadvantages. The report is prepared largely as a narrative supplement to statistical report forms used by the Chapter I evaluation and is organized into four main sections: brief introduction, description of the program, discussion of evaluation methodology and findings, and report of the follow-up study of former program students in kindergarten and third grade. Program description covers the organization of the program, characteristics of the student population, recruitment and attendance, facilities and learning materials, daily educational activities, and project costs. Evaluation information is organized according to program goals in the areas of language, arithmetic, small motor skills, and social skills. (The Record of Goals Mastery was used in the fall and spring to record achievements in these areas.) The follow-up study used comparison groups matched according to school, grade, sex, ethnic group, and, to the extent possible, month of birth. Results suggested that preschool interventions appear to produce positive results when assessments are made soon after the preschool experience, but that these advantages apparently are not well sustained when assessments are made in later years. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☒ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED251188

Chapter I Early Childhood Education Program

Year-End Evaluation Report

July 1984

Kan Yagi
Evaluation Specialist

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Kan Yagi
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Evaluation Department
Portland Public Schools
Portland, Oregon

PS 014721

6085E
08/15/84

EDUCATION CONSOLIDATION AND IMPROVEMENT ACT

CHAPTER 1 END-OF-YEAR REPORT

FISCAL YEAR 1984

PROJECT IDENTIFICATION

Name and Position of Person Completing the Report Kan Yagi,

Evaluation Specialist Phone No. 249-2000, X335

School District Name, No., and Address Portland School District #1

501 N. Dixon St., Portland, OR 97227 County Multnomah

Project Title Chapter I Early Childhood Education

State Program Number 84252A (261) Was it a Cooperative Project? Yes ___ No X

To be completed by all Districts

RETURN 2 COPIES TO:

Fred Buehling, Director
Compensatory Education
Oregon Department of Education
700 Pringle Parkway S.E.
Salem, Oregon 97310

BLANK PAGE

581-2332 (6/83)

END OF YEAR REPORT
Chapter 1, ECIA, Report for 1983-84 School Year

DISTRICT IDENTIFICATION

District Name: Portland School District #1

District Address: 501 N. Dixon St., Portland, OR 97227

County Multnomah

CONTACT PERSON COMPLETING REPORT: Kan Yagi
PHONE NUMBER OF CONTACT: 249 - 2000, X 335

DUE DATE: May 15, 1984. Return one (1) copy to:

Cliff Eberhardt, Specialist
Chapter 1 Program
Oregon Department of Education
700 Pringle Parkway S.E.
Salem, Oregon 97310

CHAPTER 1, ECIA, PARTICIPATION INFORMATION

1. Term of Project: ☐ School Year Project or ☒ Summer School Project
Summer School Projects need NOT COMPLETE items 2, 3, and 7.

2. Number of Public School attendance areas whose students were eligible for Chapter 1 services during regular school term. NA

3. Number of Public School attendance areas whose students received Chapter 1 services during the regular school term. NA

4. Number (unduplicated count) of Chapter 1 students.

Grade	Public	Non Public
Pre K	115	
K		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
Total		

581-2332 (Rev. 3/84)

5. Total number (unduplicated count) of district and Chapter 1 students by racial/ethnic group and by type of school.

RACIAL/ETHNIC GROUP	Total DISTRICT Enrollment		Enrollment in CHAPTER 1	
	Public	Non Public	Public	Non Public
AMERICAN INDIAN OR ALASKAN NATIVE--			4	
ASIAN OR PACIFIC ISLANDER----------			11	
BLACK, NOT OF HISPANIC ORIGIN------			12	
WHITE, NOT OF HISPANIC ORIGIN------			86	
HISPANIC----------			2	
RUSSIAN----------			-	
TOTAL UNDUPLICATED COUNT			115	

6. Number (duplicated count) of Chapter 1 students by instructional service area and by type of school.

INSTRUCTIONAL SERVICE AREA	Public	Non Public
READING----------	115	
LANGUAGE ARTS (other than reading)-	115	
MATHEMATICS----------	115	
OTHER (Small Motor Skills)---	115	
OTHER (Social Skills)---	115	

7. Number of staff employed in your Chapter 1 program with Chapter 1 funds reported in full time equivalents by job classification. (regular term only)

JOB CLASSIFICATION	FULL TIME EQUIVALENT
SUPERVISORY STAFF----------	
TEACHERS----------	2.5
TEACHER AIDES----------	3.0
CURRICULUM SPECIALISTS----------	
SUPPORT SERVICES STAFF----------	0.6
CLERICAL STAFF----------	1.0
OTHERS (_____)---	

NOTE: 1.0 is full time and report to the nearest tenth.

8. Indicate the estimated expenditures and sources of funds used to support your Chapter 1 Program.

CHAPTER 1 FUNDS	$ 196,517
DISTRICT FUNDS	$
OTHER FUNDS (Specify)	$ 77,682
State Disadvantaged Child Project	
TOTAL FUNDS	$ 274,199

581-2332 (Rev. 3/84)
dew/0329G

Complete and return to:
OREGON DEPARTMENT OF EDUCATION
Title I Office
700 Pringle Parkway SE
Salem, Oregon 97310

COUNTY/ESD Multnomah
DIST. NAME/# Portland Sch. Dist. 1J
PROJECT # 84252A(261)

TITLE I
DETAILED
FINAL EXPENDITURE REPORT

Report Date July 1984

Program Function	Object Codes and Description	Final Approved Budget	Total Actual Expenditures	Over (Under) Budget
1000 Instruction	Salaries	103,184	103,184	
	Employee Benefits (40.97%)	42,275	42,275	
	Purchased Services	1,542	1,542	
	Classroom Supplies	2,155	2,155	
2000 Support Services (Report all 2000 function accounts in this section)	Salaries	4,835	4,835	
	Employee Benefits (40.97%)	1,981	1,981	
	Pupil Transportation	30,000	30,000	
	Food Services	1,542	1,542	
3000 Community Services	Parent Training & Activities	350	350	
	Office Supplies & Postage	605	605	
Equipment (Attach invoice copies)				
Indirect costs @ 4 27 % (LEA must have an approved rate registered with the School Business Systems Section of the Oregon Department of Education)		8,048	8,048	
TOTAL		196,517	196,517	

If this form does not provide enough space, attach a schedule or listing. Add employe benefits and report total.

THIS REPORT IS DUE 45 DAYS AFTER COMPLETION OF EACH PROJECT NUMBER.

Maurice Caba (Manager Grants Management)	Kan Yagi	249-2000
(Name and title of authorized LEA official)	(Name of individual who prepared report)	(Phone)

Maurice J. Caba
(Signature of authorized LEA official)

Form 581-2321 (rev. 8/80)
ch

EDUCATION CONSOLIDATION AND IMPROVEMENT ACT

CHAPTER 1 EARLY CHILDHOOD EVALUATION FORM

School Name Chapter I Preschool at Kenton School

District Name Portland School District #1

Grade: (Check One)
- X Pre-Kdg.
- ____ Kdg.
- ____ 1st Grade

Subject Matter: (Check one)
- X Reading
- X Language Arts
- X Math
- X Other (specify) Social Skills

Pre Test: Record of Goals Mastery (Name of Test) 1977 (Edition) (Portland Devleoped) (Form) (Level)

Post Test: Same (Name of Test) (Edition) (Form) (Level)

Portion of Test administered:
- ____ Subtest only
- X Total test (See Note Below) *

Type of score reported:
- X Raw
- ____ Stand

Title of Subtest: ____

Student Information Student Code #	Pretest Score	Posttest Score
1. EA	32	40
2. JB	17	31
3. JBRO	14	25
4. BB	14	33
5. TB	32	41
6. TWC	5	26
7. SC	15	41
8. CC	29	41
9. JC	5	23
10. MD	26	-
11. BE	3	26
12. AE	15	25
13. MG	19	40
14. MH	16	28
15. MHe	35	41
16. SH	25	31
17. KJ	19	38
18. NL	27	-
19. TL	18	-
20. BL	-	28
21. NM	26	41
22. SO	23	40
1-1 MB	10	-
2-1 MC	7	38
3-1 TC	1	40

581-2315 (Rev. 3/84)
dew/0405G

* Total test was used but scores are recorded and reported for only four subjects as checked above.

Student Information Student Code #	Pretest Score	Posttest Score
4-1 HC	6	39
5-1 CE	2	-
6-1 BG	5	36
7-1 WG	1	41
8-1 JG	7	41
9-1 SG	11	41
10-1 BH	11	38
11-1 AH	9	28
12-1 AJ	14	40
13-1 TJ	13	41
14-1 AM	8	-
15-1 EO	16	41
16-1 JR	10	32
17-1 AS	15	40
18-1 AS1	17	41
19-1 RS	14	-
20-1 TT	14	34
21-1 BT	9	40
22-1 SA	0	-
23-1 AA	6	38
24-1 EB	3	39
25-1 AE	13	41
26-1 TK	3	41
27-1 MK	21	-
28-1 EN	8	38
29-1 MR(M)	15	-
30-1 LR	14	40
31-1 MR(E)	12	41
32-1 AR	17	41
33-1 RS	20	-
34-1 CS	16	41
35-1 ET	14	41
36-1 KW	19	41
37-1 RW	13	39
1-2 SB	18	36
2-2 AB	35	40
3-2 MC	19	35
4-2 PC	29	39
5-2 BC	17	33
6-2 KD	18	38
7-2 TE	13	33
8-2 JF	37	41
9-2 SH	17	-
10-2 LT	19	37
11-2 JJ	34	39
12-2 JJcr	33	-
13-2 WK	34	39
14-2 CL	20	40
15-2 MM	17	36
16-2 TN	10	22

Student Information Student Code #	Pretest Score	Posttest Score
17-2 CR	18	36
18-2 DR	21	-
19-2 KS	15	31
20-2 JS	31	39
21-2 JT	16	36
22-2 FB	12	38
23-2 OB	10	-
24-2 JB	15	37
25-2 LB	17	33
26-2 CB	-	-
27-2 CF	1	22
28-2 KJG	14	39
29-2 SM	34	41
30-2 DM	14	39
31-2 DR	10	[illegible]
32-2 CH(R)	10	-
33-2 PR	14	-
34-2 DR	16	37
35-2 TS	13	34
36-2 AS	18	37
37-2 TS	15	27
38-2 CS	10	-
39-2 JV	21	-
40-2 JW	19	39

DATA QUALITY ASSURANCE CHECKLIST

The following information is required as a quality control check for the achievement impact data.

1. Was all pretesting accomplished within 2 weeks of the empirical norm date of the list(s) listed in Section C? NA — YES [ ] NO [ ]

2. Was all posttesting accomplished within 2 weeks of the empirical norm date of the list(s) listed in Section C? NA — YES [ ] NO [ ]

If response to items 1 or 2 is "No" indicate actual testing time for those tests not administered according to norm date limits.

Subject	Grade	Test	Actual Dates of Testing: Pretest	Posttest

3. If testing was not completed within the empirical norm date limits, did you adjust the scores reported in Section D? YES [ ] NO [ ]

4. If a test score was used for student selection, was a different score used for the pretest? YES [ ] NO [ ]

5. Did 2/3 of the project occur between pretesting and posttesting? YES [ ] NO [ ]

6. All arithmetic computations have been double checked. YES [X] NO [ ]

7. Describe any test administration problems, or evaluation concerns associated with your impact data, below or on the back of this sheet.

None

8 -2315 (Rev. 9/83)

Signature

Chapter I Early Childhood Education Program

Year-End Evaluation Report

July 1984

Kan Yagi
Evaluation Specialist

Evaluation Department
Portland Public Schools
Portland, Oregon

6085E
08/15/84

TABLE OF CONTENTS

	Page
1. Introduction	1
2. Description of the Program	1
Organization of the Program	1
Characteristics of the Student Population	2
Recruitment and Attendance	3
Facilities and Learning Materials	5
Daily Educational Activities	5
Project Costs	6
3. Evaluation Methodology and Findings	6
Language	8
Arithmetic	9
Small Motor Skills	10
Social Skills	10
4. Follow-Up Study for Former Program Students in Kindergarten and Grade 3	17
5. Observations and Comments	23
6. Summary and Conclusions	26

BLANK PAGE

INTRODUCTION

This year-end evaluation report concludes the twelfth year of operation of the Chapter I Early Childhood Education (Preschool)* Program in Portland Public Schools. The report is prepared largely as a narrative supplement to the statistical report forms used by the Chapter I ESEA evaluation and is organized into four major sections: introduction, description of the program and evaluation method and findings. The purpose of the Preschool program is to provide educationally disadvantaged children the experiences needed to ameliorate the disadvantages.

DESCRIPTION OF THE PROGRAM

Information for the program description was obtained by reviews of program documents and materials, observations of classrooms and interviews with the staff. The description includes the following: (a) organization of the program, (b) characteristics of the student population, (c) recruitment and attendance, (d) facilities and learning materials, (e) daily educational activities and (f) project costs.

Organization of the Program

This year, all Chapter I Preschool classes were again located at Kenton School as they were last year. Two classrooms held two sessions of 2-1/2 hours daily and the third held one - a total of five classes. The capacity of the program was 100 children in classes of 20 each.

*The term, preschool, will be used here to identify the program and students in prekindergarten. The term, early childhood education, has sometimes been used in other studies to include kindergarten and other primary grades.

Each classroom was staffed with a certified teacher and an aide. One teacher had previous experience in the program and for a second this was her first year. The third teacher moved and was replaced a few months into the school year. The principal at the school provided overall supervision of the classrooms and otherwise treated them like any others in the building. Specific administrative functions peculiar to the program were handled through the Headstart Program Coordinator's office.

Characteristics of the Student Population

Table 1 shows the ethnic background of students enrolled during the 1982-83 school year. The majority was white (75 percent), with 25 percent being minority, which is essentially the same as the 26 percent minority enrollment for the entire district. Most students reside in the North Portland area which is predominantly white.

TABLE 1

Ethnic Composition of Student Population

Ethnic Group	N	Percent
White	86	75
Black	12	10
Spanish Surname	2	2
Oriental	11	10
American Indian	4	3
Total	115	100

Recruitment and Attendance

Eligibility for participation in the program is based on age, residency within the boundaries of Chapter I school service areas, family income, number of parents and siblings, and an appraisal of the student as educationally disadvantaged.

Enrollment of students in the Chapter I preschool program is voluntary. Parents who seek to enroll students are interviewed to determine the reasons for enrolling their children, family's educational history, children's medical history and factors which might influence the children's educational achievements positively, as well as negatively. Accommodations are usually made during the year for children who were attending preschool programs in other cities or states and seek to become enrolled in the Portland schools.

Knowledge of the program is usually gained through word of mouth with some students referred by schools and human service agencies. The program has become so well-known that by the end of a school year, enrollment for the next year is virtually complete. A waiting list of eligible students is maintained so vacancies are filled without significant delay.

Student attendance each month is shown in Table 2 for all classrooms combined. The percent student attendance is determined by dividing the total days present by the total days membership. The resulting figure represents the percent of students in attendance on a typical school day. The monthly averages tend to be about 87 percent, which is the same as last year and

slightly above the averages of the previous years. Averages for kindergarten children tend to be about 91 percent, with averages for all K-12 students about 93 percent.

TABLE 2

Percent Student Attendance

Month	Percent
September	93
October	90
November	88
December	86
January	84
February	79
March	88
April	88
May	86
June	87

Tabulations of individual attendance indicated some students were absent more frequently than others. One of five (20 percent) of the 77 students who was enrolled for 140 days or more was absent 30 days or more; 7 of them were absent 40 days or more. A large number of absences for a single year with extenuating circumstances such as serious illnesses may not be particularly undesirable, especially at the preschool level; however, if students are allowed high frequencies of absences through subsequent grades, the pattern could result in serious handicaps for the children. Besides being handicapped

academically, children could develop the attitude that it is acceptable to miss school occasionally as it may at least seem to them.

The question of student turnover, especially among disadvantaged children, arises frequently. Attendance records indicated 74 students (64 percent) were enrolled for 156 days, or more than 90 percent of the full school year.

Facilities and Learning Materials

The facilities and materials in the classrooms appeared adequate for conducting a program of this nature. Each classroom has a record player which is used almost daily; projectors and other audio-visual equipment are generally shared in the school. Room furnishings are arranged to provide a library area with a large number of books, a housekeeping area with housekeeping equipment and a game area with numerous puzzles and games. Some classrooms accommodate for growing plants, play-store, listening center and even live animals. Teachers and aides show considerable ingenuity, especially in designing quantities of the consumable work material used daily. In general, the materials and equipment appeared appropriate to facilitate meeting the instructional goals as shown on the Record of Goal Mastery (attached).

Daily Educational Activities

As in past years, there is a great similarity among classrooms in the kinds of activities one would observe. There is a mixture of large and small group activities alternated during a session. Each session usually begins with a

large group activity involving roll call; the identification of the day, date and month; and a description of the kind of weather. Small group activities identified with the achivement goals usually follow. Although there are variations in schedules across classrooms, they generally include a story time, large and/or small motor development activity and snack time, all of which are conducted in large group settings. Free play and most of the specific academic skill development activities are usually individual or small group arrangements. The design for each activity is largely the discretion of the teacher.

Project Costs

The budget for the 1983-84 school year is shown in Table 4. The major cost item, of course, is salaries and benefits of staff. An estimate of the cost-per-pupil derived by dividing the total budget of $196,517 by the average daily membership is slightly over $2,000.

EVALUATION METHODOLOGY AND FINDINGS

Most classroom instruction is targeted for those achievements or skills that can be learned and which are less dependent on maturation for attainment. Language skills and numerical concepts, along with some small motor and social skills, are primarily learned. On the other hand, large motor and perceptual skills are heavily influenced by maturation - performances which are highly associated with physical maturity. Evaluation for Chapter 1 purposes reflects this priority of instruction.

TABLE 4

Program Budget 1983-84

Item		Allocation
Instruction		
Salaries		
Teachers	(2.5)	50,420
Aides	(3.0)	26,172
Coordinator	(.2)	6,838
Sp. Pathologist	(.2)	6,813
Secretary	(1.0)	12,941
Employee Benefits	40.97%	42,275
Purchased Services		
Field Trips & Related Costs		1,200
Telephone		342
Classroom Supplies		2,155
Support Salaries		
Salary		4,835
Benefits	40.97%	1,981
Pupil Transportation		30,000
Food Services		1,542
Community Services		
Parent Training & Activities		350
Office Supplies & Postage		605
Administrative Overhead	4.27%	8,048
	Total	196,517

The evaluation information is organized according to the program goals in the four subject areas of language, arithmetic, small motor skills and social skills. The Record of Goals Mastery was used in the fall (October) and again in the spring (May) to record the achievements of goals in these areas. The data were tabulated to show the percentage of students who demonstrated mastery of the skill at each time of the year. Differences in the percentages of students demonstrating mastery at the beginning and end of the year indicate the achievements of the students during the year. The scores and differences shown in Tables 5, 6, 7 and 8 are based on students with matched Fall and Spring scores; therefore, the number is smaller than the number enrolled during the year or enrolled at any one time.

Language

As shown in Table 5, the percent of students demonstrating mastery of each language skill by the end of the school year ranged from 63 percent to 97 percent. The percent of students who appeared to have achieved the skill during the year ranged from 15 to 76 percent, depending on the particular skill; about one-third to two-thirds achieved the skills during the year. Longitudinal data now spanning eight years showed achievements in language generally appear to be slightly lower than they were the last two years but still noticeably better than the first five years. Some caution should be exercised in interpreting this finding because teachers differ in their rating and, due to turnover, the composition of the teaching staff changes each year.

Again, as in previous years, identifying common objects, e.g., parts of the body, animals and describing objects according to colors and locations, are skills achieved most easily by children and demonstrated most frequently.

These skills are also ones which are more commonly reinforced at home or outside of school. Mastery of language skills more characteristically associated with school, e.g., giving answers to questions about a story and reciting rhyming combinations, was demonstrated less frequently.

Arithmetic

Table 6 shows the percent of student achievements in arithmetic skills. The percent showing mastery at the end of the school year ranged from 79 to 95 - a range that is slightly smaller than that for language. The percent who appeared to have achieved the skill during the year ranged from 53 to 89, depending on the particular skill. Arithmetic skills are largely those achieved at school and not practiced as much at home or outside of school so it is not surprising that more of these skills are learned than language during the year.

The pattern of achievement in arithmetic over the last eight years is much like that for language, i.e., in general there was a slightly lower percentage of students demonstrating mastery at the end of the year, but a higher percentage achieving mastery of these skills than the first five years. Again, the same caution due to teacher differences holds in the interpretation of these findings.

Nearly all of the arithmetic skills appear to be those which are addressed most commonly in schools and are less likely to be reinforced in homes or outside of school. Perhaps for this reason, the percent of children

demonstrating mastery of arithmetic skills is slightly lower than for language at both the fall and spring observations. Mastery of quantity and size comparisons is demonstrated more frequently than skills which are more academic in nature, e.g., associating symbol with number.

Small Motor Skills

Achievements of small motor skills are shown in Table 7. The children mastered most of these skills quite easily, with nearly 50 percent or more acquiring the more difficult skills of using scissors, using opposing thumb and pounding nails during the year. About 90 percent or more of the children demonstrated mastery of each of the small motor skills by the end of the school year. Pounding nails, a difficult task even for adults, was mastered by all children. Small motor skills involve eye-hand coordination in manipulating an object. Manipulating a mechanical object, scissors, continues to be among the most difficult skills to master.

Social Skills

Table 8 shows the achievements of social skills. The percents of students demonstrating mastery in the fall are high, and for this reason the percents achieving the skills during the year are generally lower than those achieving skills in other areas. Social skills are usually not taught as a separate entity; rather, other learning activities are arranged or conducted in a manner to cultivate these skills. Many skills are also those taught and practiced at home or outside of school, so some learning takes place there.

Because social skills are such an integral part of all activities, it may be appropriate to assess these skills in the context of specific kinds of learning tasks where conformity is usually required or requested, e.g., remaining quiet, staying in line.

In general, social skills involving interactions with others are achieved more readily than skills involving the child alone. For example, more children demonstrate mastery of sharing toys with others than they do of overcoming fear of new situations. Patterns of achievement of social skills over the last eight years are comparable, i.e., the percents showing mastery of the skills at the end of the school year are comparable to those of previous years.

Overall, the achievements of the students in the four skill areas of language, arithmetic, small motor and social skills tended to be quite satisfactory, with about 90 percent of the students mastering 75 percent or more of the skills in each area. Achievements appeared to be about equal to those of the last two years and better than years previous to those years.

Table 9 shows the percentages of students demonstrating mastery (expressed as percentages) of the objectives for each subject for the last eight years. The results for Spring 1984 show that in each area, over 40 percent of the students demonstrated mastery of all goals. The percentages of students mastering 100 percent of the goals in each area were about the same as those for the previous two years and higher than those of the first five years. It is possible that the increased attention of teachers and aides to time on task has resulted in increased performances.

TABLE 5

Language Skills

N = 78

LANGUAGE SKILL	Percent Mastering Skill: Pre-Test	Post-Test	% Gain
Describes objects according to their characteristics			
Colors:			
(red, yellow, blue)	45	90	45
(green, orange, purple)	27	88	61
(brown, black, white)	22	88	66
Location:			
(stove, bed, toilet, refrigerator, bathtub, sofa)	40	90	50
Answers simple questions by giving answers in complete sentences	44	90	46
Identifies common objects:			
(head, leg, arm)	82	97	15
(eyes, nose, mouth, ears, foot, knee, hand, fingers)	71	95	24
(rabbit, dog, cat, bird)	65	97	32
(horse, chicken, cow, goat, sheep)	26	83	57
(lion, tiger, monkey, elephant, seal, camel, bear, giraffe)	9	85	76
Listens with increasing attention span:			
(longer or more complex stories can satisfactorily be presented by the teacher as the year progresses)	40	91	51
Expresses self freely and clearly:			
(notifies teacher when it is appropriate, e.g., when s/he needs help or permission)	60	95	35
Gives clearly spoken, spontaneous answers to questions about a story	37	91	54
Orally identifies four simple rhyming combinations	14	63	49
Understands and uses simple prepositional relationships:			
(places objects in front of, behind, beside, under, around, inside, outside, on)	29	83	54

TABLE 6

Arithmetic Skills

N = 78

ARITHMETIC SKILL	Percent Mastering Skill: Pre-Test	Post-Test	% Gain
Recognizes and identifies simple shapes:			
(points to and names: circle, square, triangle)	37	90	53
(points to and names: rectangle, diamond)	4	82	78
Distinguishes comparative sizes and quantities:			
(points to those objects that are identical in size within a group)	21	92	71
(points to the smallest and largest of six objects)	15	90	75
(points to which group has more and which has less of two groups of objects, e.g., 3 pencils and 6 pencils)	18	95	77
(places in order six objects of different size)	12	79	67
Associates numerals with the quantities 1-5:			
(states orally the appropriate number when shown from one to five objects)	21	86	65
(associates the oral numerals [zero to five] with the appropriate numerical symbol [0 to 5])	13	82	69
Begins to understand the concept of sets:			
(points to a set of objects that are placed among non-set objects)	6	82	76
Understands the concept of one more and one less:			
(points to which group contains one more object and which contains one less object than a comparison group)	6	95	89
Understands the concept of zero:			
(states orally when zero objects of a given type are presented)	5	82	77

TABLE 7

Small Motor Skills

N = 78

SMALL MOTOR SKILL	Percent Mastering Skill		
	Pre-Test	Post-Test	% Gain
Pinches off bits, squeezes, pounds, pats and pushes clay or dough	56	100	44
String beads	82	100	18
Manipulates puzzles: stacks materials, pegs, parquetry blocks	81	100	19
Uses crayons, paint brushes and pencils	47	97	50
Uses scissors correctly	45	88	43
Uses opposing thumb	17	99	82
Pounds a nail with a hammer	0	100	100

TABLE 8

Social Skills

N = 78

SOCIAL SKILL	Percent Mastering Skill: Pre-Test	Post-Test	% Gain
Participates in a variety of activities during free play	67	95	28
Shares classroom toys with other children	78	90	12
Helps others when requested to do so	62	95	33
Uses classroom materials in the appropriate fashion	49	95	46
Able to play or work in small groups of peers (e.g., does not fight, dictate, or demand or submit to others)	71	88	17
Communicates with adults (e.g., does not demand excessive attention, ignore other children in favor of adults, reject adults and/or act in hostile fashion toward adults)	78	83	5
Able to encounter new situations in the classroom without fear (e.g., the student does not withdraw or lag back)	49	78	29
Demonstrates safety consciousness (e.g., awareness of dangerous objects, follows orders of teacher regarding safety issues)	51	91	40

TABLE 9

Percentages of Students Achieving 100, 75-99 and Less than 75 Percent of the Goals in Each Subject (1977 to 1983)

Year	Percentage	Reading/ Language	Numerical	Small Motor	Social Skills
1977	100%	16	19	33	55
	75-99%	79	58	64	38
	less than 75%	05	23	03	07
1978	100%	18	16	37	73
	75-99%	61	40	56	20
	less than 75%	21	44	06	07
1979	100%	15	15	45	Not Determined
	75-99%	39	27	20	
	less than 75%	46	58	35	
1980	100%	26	33	71	71
	75-99%	56	32	15	20
	less than 75%	18	35	14	09
1981	100%	30	18	30	67
	75-99%	53	50	68	22
	less than 75%	17	32	02	11
1982	100%	52	50	86	63
	75-99%	39	36	11	20
	less than 75%	10	14	03	17
1983	100%	68	64	87	76
	75-99%	27	32	12	17
	less than 75%	05	04	01	07
1984	100%	41	50	88	63
	75-99%	47	37	10	28
	less than 75%	12	13	01	09

FOLLOW-UP STUDY OF FORMER PROGRAM STUDENTS IN KINDERGARTEN AND GRADE 3

Conclusions of earlier follow-up studies conducted in 1978-80 of former Title I preschool students were that their performances in kindergarten were quite consistently better than those of other students in the same grade. However, in these studies, teachers were asked to rate the performances of the former preschool students as compared to others in his or her class, i.e., matched comparison students or a group of comparable students was not selected from the same classrooms.

To overcome the weakness of a matched comparison group, studies of the last three years have used comparison groups matched according to school, grade, sex, ethnic group and, to the extent possible, month of birth. Also, district enrollment records were obtained and used to avoid selecting comparison group members who had preschool experiences in other district preschool classes.

Like the last two studies the follow-up study of preschool students of 1982-83 was conducted in Spring 1984. Ninety-three former preschool students were found to be enrolled in kindergarten in 18 schools. Ratings were obtained for 75 matched pairs. For the remaining 18 students satisfactory matches could not be made for them or performance ratings were not returned for one of the pair. Again, a non-preschool comparison group of kindergarten students matched according to school, grade, sex, age and ethnic group was identified. Age matching was nearly always possible within a month or two, and only a few differences were greater than two months.

As in earlier studies kindergarten teachers of the former preschool and comparison students were asked to rate each student's achievements in six skill areas using six-point rating scales (see attachment). Students were to be rated below average (1-2), average (3-4), or above average (5-6), compared to other students in the class. Mean ratings were calculated for the preschool and comparison groups for the six skill areas. The results are shown in Table 10.

TABLE 10

Performance Ratings of Preschool and Comparison Groups (N = 75)

Skill Area	Preschool Mean	Preschool SD	Non-Preschool Mean	Non-Preschool SD	Mean Difference (P - NP)
Ability to Remain on Task	3.29	1.39	3.60	1.41	-0.31
Language Skills	3.40	1.38	3.77	1.36	-0.37
Numerical Concepts	3.59	1.14	3.83	1.32	-0.24
Small Motor Skills	3.52	1.23	3.63	1.20	-0.11
Large Motor Skills	3.73	1.14	3.96	1.14	-0.23
Social Skills	3.43	1.30	3.75	1.48	-0.32

The sign test was used to determine if the performances of one group were consistently better than those of the other across the six skill areas. The means of the non-preschool comparison group were all higher, indicating the differences are consistent. Also, t-tests were used to determine if there were significant group differences on specific skills. None of the

comparisons on specific skills reached the accepted level of significance (p. less than .05). These results are interpreted to indicate the differences for specific skills are small, but consistently different in favor of the non-preschool group.

Findings of the last two years are puzzling in view of results and interpretations from previous follow-up studies. In previous studies, ratings of performances of former preschool students were higher than ratings of their peers, but the results for the last two studies indicate no differences or differences in favor of the non-preschool group. These differences appear to be occurring in spite of apparent improvements in performances of preschool students in Chapter I preschool classes these past few years.

The design of the follow-up studies has attempted to control for certain factors; however, there are a few that we have been unable to control for practical reasons. One is the quality of the students enrolled over the years, as influenced by changes in the date of birth for eligibility and changes and enforcement of other eligibility requirements. It is possible that, as a group, more recent students were more disadvantaged than students in earlier years. A second is the involvement of different instructional personnel in preschool classes as a result of turnover, reassignment, and the reduction in the number of students served. Noticeable differences can be expected to be observed more frequently when the number of classes is small.

A third factor is the individuals involved in rating student performances. During the last three years, performance ratings have been obtained from

kindergarten teachers for groups of students who have been matched according to the variables mentioned earlier. Matching according to schools did not include matching according to classrooms or classroom teachers; therefore, both members of a matched pair of students was not necessarily rated by the same teacher. It was assumed that with the large number of schools and classrooms involved in the studies, as a group, teacher differences in rating tendencies would be balanced for the former preschool and comparison group populations. It should be noted that teachers were not informed of the students' group membership at the time ratings were made; however, they could have known it from interactions with students during the school year.

A final factor, and one which deserves some consideration, is differences in the time of year when the follow-up surveys were conducted. Earlier studies were conducted about midway through the school year or slightly earlier (December to January), while the last three studies, especially the last two, were conducted after two-thirds or more of the school year had passed (March to May). In spite of contentions that instruction is individualized, students in the same group are exposed to the same curricular content. Some individuals contend that students who have previously mastered the curriculum being taught at the time are not challenged or challenged with new, educationally worthwhile material, so they mark time, become bored, cause problems, or otherwise gain very little. There could be a tendency for ratings of these students to be lower because they appear to demonstrate less growth than their peers. These students could be rated lower because they could be more difficult to control due to the lack of challenge. If it were found that students with preschool experience were rated higher during the

early part of their kindergarten year but lower during the end of the year, could the change in relative performance be due to instruction or to the incapabilities of the particular student population to sustain the advantage? More data from carefully designed follow-up studies are needed to make sound generalizations about the effect of preschool on performances in kindergarten.

The follow-up study of former preschool students in 1979-80 using basic skills achievement scores from the district-wide testing program in grades 3 to 8 was replicated this year. Because a comparison group was not identified for this preschool group, their scores will be compared with scores of schools in which the students were enrolled.

Of 162 students enrolled in the then Title I Early Childhood Education program in 1979-80, 103 (64 percent) were found to be enrolled in Portland Public Schools during the 1983-84 school year. The remaining 59 (36 percent) were not found on the District's master file and are assumed to have moved from the District. Fall and Spring achievement test scores were obtained from the city-wide testing program for 73 of 78 students identified as being in grade 3; no scores were recorded for the remaining 5 students. Twenty-two more were identified as being in grade 2, and one each was found listed in grades 1 and 4, and special education. Of the 23 listed as being in grade 1 or 2, only 9 had birthdates on October 1, 1975 or later indicating that age as well as immaturity were probably the reasons they were retained in a grade.

Results for the 73 students for whom nearly all test scores were available are shown in Table 11. Because nearly all were found to be in schools with

Chapter I programs, the overall Fall and Spring mean scores of the 19 Chapter I schools in which 93 percent of these former preschool students were enrolled are used for comparison purposes. These schools include essentially all elementary schools in the Roosevelt and Jefferson clusters and schools in the northern half of the Madison cluster.

TABLE 11

Mean Fall 1983 and Spring 1984 Achievement Test Scores of Former ECE Students of 1979-80 and Comparison Students in Grade 3

	Fall			Spring		
Subject	Comparison[1] Group	ECE[2] Group	Diff (C-E)	Comparison Group	ECE Group	Diff (C-E)
Reading	184.03	185.30	1.27	192.40	195.12	2.72
Math	180.90	181.44	0.54	192.82	193.56	0.74
Language	189.17	189.56	0.39	194.17	195.98	1.81

[1] Ns for Comparison Group ranged from 999 to 1047
[2] Ns for ECE Group ranged from 66 to 71

The results in Table 11 show the mean scores of the former ECE students are consistently higher than those of their peers in the comparison group for both Fall and Spring in all three subjects; however, none of the differences reached the accepted level of significance (p greater than .05). These findings are contrary to those of the 1982 study in which it was found that the scores of former ECE students were consistently lower than those of their grade level peers in grades 3 and 4. This earlier study also found that a fair number of students appeared to have been retained a grade, so the findings for 1983-84 do not seem to be attributed to the absence of scores for retained students.

The achievement test results are much more encouraging than those of earlier studies; however, more data are needed to substantiate the findings. Subsequent follow-up studies will involve students matched on the basis of sex, school attended in kindergarten, ethnicity, and to the extent possible, month of birth.

OBSERVATIONS AND COMMENTS

Over the last few years, observations of classroom activities have been made at intervals throughout the year. One purpose was to examine the curricular content and student behavior changes as the year progressed. The focus of this purpose was on the learning content. The second purpose was to identify exemplary practices that might be shared among teachers, or to identify common problems and to determine ways of solving them. The focus of this second purpose was on instruction. In this manner, both curriculum and instruction were examined.

The Early Childhood Education teaching guide was developed for the District in 1973. The Title I/Chapter 1 program curriculum follows this guide with some minor changes, mostly within content areas. Like any test, the Record of Goals Mastery includes only a sample of items within learning content areas in which mastery is to be expected. It is not the total content, but represents the curricular areas quite well. The scope of the curriculum seems satisfactory, so the next concern is the organization and sequence for learning.

Teachers select materials and arrange learning experiences to enable children not only to master the content areas being measured, but to achieve mastery in areas, perhaps, considered to be of equal or greater educational significance. Regardless of the content area, as the year progresses one should observe children being exposed to content that requires increasingly more ability to master and children performing previously learned skills with increasingly greater facility. In some content areas, increasing complexity and increasing skills are quite apparent, e.g., recognition of letters to recognition of words. In others, however, the complexity or skills dimensions are more difficult to discern, e.g., following directions, interacting with peers. Whatever the case, children at the preschool age mature rapidly, and if changes in curricular emphases are made to correspond with increasing maturity, such changes should be observable over time. In fact, items in the Records of Goals Mastery were purposely selected, and, to some extent, arranged according to difficulty or complexity.

The more systematic observations made these past few years tend to indicate that changes in curricular emphases with increasing skill and maturity of students are not as observable as expected. The concepts of increasing complexity and ability to perform do not seem to be applied as consistently and frequently as they could be in the curriculum organization and schedule. For example, children begin using scissors in the first week of school; apparently there are no prerequisites and sequence of introduction. The early introduction of the skill might be acceptable; however, one might expect the materials students are cutting out to change over time and that speed and accuracy might be emphasized. Some support for the contention that sequencing is a problem is available in data from the Records of Goals Mastery and ratings by individual teachers.

In earlier records, where larger numbers of students and classes were involved, percents of students mastering each item on the students' Records indicated quite clearly the expected differences among items, i.e., higher percentages of students mastering easier items and lower percentages mastering harder ones. Obtained differences in percentages of students mastering easier and harder items in more recent data are not as distinct or not noticeable at all. The solution to this apparent problem is not just a curricular one, but one involving instruction as well.

Observations over the last few years concentrated on increasing on task behavior and some instructional arrangements were identified to accomplish this end. It is now apparent that attention to increasing complexity and increasing skills could also increase on task behavior.

Children are quite frequently, and quite inadvertently, encouraged to work quickly. The fact that a fairly familiar task can be made to be more difficult and, therefore, more challenging does not appear to be a consideration. For example, emphasizing precision and accuracy in performing tasks can make them more challenging. Children are often encouraged to get the task done -- to get the work done as quickly as possible -- in order to pursue something perceived as more desirable, e.g., play or free time. All learning tasks should be perceived as interesting and desirable, and not dichotomized as undesired work and desired play. Children at the preschool age probably acquire the distinction between which is school work and which is play the old fashioned way. They LEARN it.

Another observation involves the fact that a fair amount of student time is devoted to large group activities in which all students are expected to be doing the same thing simultaneously. Observations show that at any given time, several students are not performing as they are being directed. For example, recorded instructions accompanied by music direct students to extend left hand, right hand, left foot, or right foot. Oftentimes, the students are not only not responding in unison with the proper left-right sequence, but not responding in unison with the proper body part. Allowing students to ignore directions in these circumstances reinforces the behavior of ignoring directions in others. They also do not learn what they are expected to learn in the activity, e.g., left-right distinction, names of body parts. Learning is facilitated when students perform as they are expected.

Observations for 1984-85 will attempt to focus on two aspects: On-task behavior and following directions in large group activities particularly in learning what is expected to be learned.

SUMMARY AND CONCLUSIONS

The evaluation of the Chapter I Early Childhood Education Program includes information on students during and at the conclusion of their preschool experiences and follow-up information on students a year ago and four years ago. Most of the evaluation tends to focus on academic achievement, especially in the follow-up in later years, with some attention to social and physical skills in the earlier preschool and kindergarten years.

Preschool evaluation results over the last few years are quite similar despite some changes in instructional personnel each year. The results are generally more favorable than they were in earlier years with students making greater gains especially in academic areas. Perhaps the District's achievement focus is having an influence even at the preschool level.

Results of follow-up studies are like those of studies across the country. Preschool experiences appear to produce positive results when assessments are made soon after the experiences, but the advantages the students have at these early points are apparently not well sustained when assessments are made in later years. A possible concern is development in non-academic areas - areas not measured by achievement tests - such as moral, ethical, and social values; personal responsibility, decorum, and conservation which could be the reason gains are not well sustained. Specifically with regard to formal education, are there expectations of proper behavior that students at each grade level should display while they are in school, and if so, what are they and how are they expected to learn them?

Preschool is the first exposure of most students to a learning environment they will face for the next 12 to 14 years or more. What expectations do kindergarten teachers have of students with preschool experiences? Do they want students to have achieved the academic levels these program students have these past few years? Or, would they prefer students to have achieved in other areas leaving the teaching of academic skills to kindergarten? Exactly what would they prefer any student to have achieved before entering kindergarten?

Similar questions could be asked at any grade level, and there are some acceptable standards for academic achievement, e.g., performances at grade level or better. However, there are no standards in non-academic areas and no standard curriculum - nothing to determine what preschool might be expected to accomplish so that gains might be sustained. Perhaps learning something akin to the "work ethic" might be considered. If so, might there not be standards for school attendance, time on task, respect for others, and responsibility for property?